

# Agenda Item Form

Agenda Date: Aug. 24, 2004

Districts Affected: N/A

Dept. Head/Contact Information: Mr. Roy Gilyard, 591-9735 x11

## Type of Agenda Item:

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Resolution            | <input type="checkbox"/> Staffing Table Changes   | <input type="checkbox"/> Board Appointments        |
| <input type="checkbox"/> Tax Installment Agreements       | <input type="checkbox"/> Tax Refunds              | <input type="checkbox"/> Donations                 |
| <input type="checkbox"/> RFP/ BID/ Best Value Procurement | <input type="checkbox"/> Budget Transfer          | <input type="checkbox"/> Item Placed by Citizen    |
| <input type="checkbox"/> Application for Facility Use     | <input type="checkbox"/> Bldg. Permits/Inspection | <input type="checkbox"/> Introduction of Ordinance |
| <input type="checkbox"/> Interlocal Agreements            | <input type="checkbox"/> Contract/Lease Agreement | <input type="checkbox"/> Grant Application         |
| <input type="checkbox"/> Other _____                      |   |  |

## Funding Source:

- ☐ General Fund  
☒ Grant (duration of funds: 12 Months)  
☐ Other Source: \_\_\_\_\_

## Legal:

- ☐ Legal Review Required      Attorney Assigned (please scroll down): Kevin Elkins      ☒ Approved      ☐ Denied

Timeline Priority: ☒ High      ☐ Medium      ☐ Low      # of days: \_\_\_\_\_

## Why is this item necessary:

This agreement provides for the El Paso Metropolitan Planning Organization (MPO) office operational funds to test improving international mobility at the El Paso Del Norte Port of Entry's (POE's).

## Explain Costs, including ongoing maintenance and operating expenditures, or Cost Savings:

The Federal Highway Administration (FHWA) in conjunction with General Services Administration(GSA), Customs and Border Protection and Immigration and Customs Enforcement, developed a tool called Border Wizard (BW) to facilitate improvements to border crossings that increase security, traffic throughput, and trade efficiency. Border Wizard is maintained and distributed by the GSA under an agreement of the Border Station Partnership Council, consisting of the four developing agencies.

## Statutory or Citizen Concerns:

None Known.

## Departmental Concerns:

The El Paso Metropolitan Planning Organization (MPO) is requesting that Building and Planning Services be authorized to negotiate, the City Attorney's Office be authorized to review, and the Mayor be authorized to sign a Local Project Advance Funding Agreement for the Border Wizard Software Program by and between the Texas Department of Transportation (TXDOT) and the City of El Paso (City), as the fiscal agent for the Metropolitan Planning Organization (MPO); and that the Mayor is hereby authorized to execute any necessary budget transfers to accomplish the intent of this Resolution.


The Federal Highway Administration (FHWA) would like the Border Wizard Program to be available for transportation agencies to use as a modeling tool to enhance border planning and coordination with GSA and the border agencies operating under the Department of Homeland Security (DHS).

## METROPOLITAN PLANNING ORGANIZATION (MPO) OFFICE

### MEMORANDUM

DATE: August 19, 2004

TO: Mayor Joe Wardy and City Council Representatives

FROM:  Roy Gilyard, Executive Director of the MPO Office

SUBJECT: City Council Agenda – August 24, 2004 - Resolution

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The El Paso Metropolitan Planning Organization (MPO) is requesting that Building and Planning Services be authorized to negotiate, the City Attorney's Office be authorized to review, and the Mayor be authorized to sign a Local Project Advance Funding Agreement for the Border Wizard Software Program by and between the Texas Department of Transportation (TXDOT) and the City of El Paso (City), as the fiscal agent for the Metropolitan Planning Organization (MPO); and that the Mayor is hereby authorized to execute any necessary budget transfers to accomplish the intent of this Resolution.

The Federal Highway Administration (FHWA) would like the Border Wizard Program to be available for transportation agencies to use as a modeling tool to enhance border planning and coordination with GSA and the border agencies operating under the Department of Homeland Security (DHS).

If you have any questions, please do not hesitate to contact me at (915) 591-9735, Ext. 13.

Thank you.

cc: Jim Martinez, CAO  
Laura Uribarri, Executive Assistant to the Mayor  
Lisa Elizondo, City Attorney  
Kevin Elkins, Assistant City Attorney

## RESOLUTION

### BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

That Building and Planning Services be authorized negotiate, the City Attorney's Office be authorized to review, and the Mayor be authorized to sign a LOCAL PROJECT ADVANCE FUNDING AGREEMENT for the Border Wizard Software Program by and between the Texas Department of Transportation ("TXDOT") and the City of El Paso ("City"), as the fiscal agent for the Metropolitan Planning Organization; and that the Mayor is hereby authorized to execute any necessary budget transfers to accomplish the intent of this Resolution.

**ADOPTED this 24<sup>th</sup> day of August, 2004.**

THE CITY OF EL PASO

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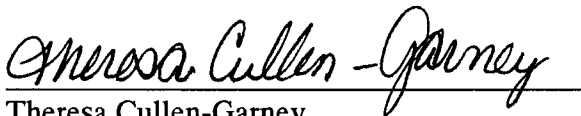
Joe Wardy  
Mayor

ATTEST:

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Richarda Duffy Momsen  
City Clerk


APPROVED AS TO FORM:

  
Theresa Cullen-Garney  
Deputy City Attorney

APPROVED AS TO CONTENT:

  
Roy Gilyard, Executive Director  
Metropolitan Planning Organization

APPROVED AS TO CONTENT:

  
Patricia D. Adauto  
Deputy Chief Administrative Officer  
for Building & Planning Services

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION**

**Grant Title:** Border Wizard Case Studies  
**Sponsoring Organization:** Federal Highway Administration  
Office of Freight Management and Operations (HOFM)  
Office of Border and Interstate Planning (HEPI)

**Points of Contacts:** Roger Petzold  
HEPI  
202-366-4084 , [Roger.Petzold@fhwa.dot.gov](mailto:Roger.Petzold@fhwa.dot.gov)

Crystal Jones  
HOFM  
202-366-2976; [Crystal.Jones@fhwa.dot.gov](mailto:Crystal.Jones@fhwa.dot.gov)

**Period of Performance:** 12 Months from receipt of funding

**Objective:** Use a series of case studies to determine the feasibility of using Border Wizard to support transportation planning and determine the feasibility using Border Wizard to complement other transportation models used to support planning.

## **BACKGROUND**

The Federal Highway Administration (FHWA) in conjunction with General Services Administration(GSA), Customs and Border Protection and Immigration and Customs Enforcement, developed a tool called Border Wizard (BW) to facilitate improvements to border crossings that increase security, traffic throughput, and trade efficiency. Border Wizard is maintained and distributed by the GSA under an agreement of the Border Station Partnership Council, consisting of the four developing agencies. FHWA would like to make BW available for transportation agencies to use as a modeling tool to enhance border planning and coordination with GSA and the border agencies operating under the Department of Homeland Security (DHS).

FHWA seeks to determine how effectively BW can be used to answer transportation-related questions associated with land border crossings and their environs. To determine BW's effectiveness in addressing transportation problems at the border, the FHWA intends to have four local/regional planning organizations document their use of BW. In addition, FHWA wants to determine how BW can be integrated with local transportation models used by transportation planning agencies, and the advantages and disadvantages of doing so. Using BW as a complement to local transportation models has the potential to add capability to address border transportation planning needs without losing investment already made in existing tools. Grant recipients will document their use of BW to include but not limited to advantages and disadvantages of using the tool, shortcomings of the tool and recommendations on modifications that would make BW a more useful in transportation planning. FHWA will use this data to coordinate with the Border Station Partnership Council (BPSC) on ways leverage BW to enhance border planning and coordination.

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FHWA's goal is fund four projects. Below are four candidate study projects and a synopsis of each site's anticipated use of BW:

- **Southern Border**

- **El Paso, TX/ Texas DOT**

- Use Border Wizard and the Trans-border Travel Demand Model (TDM) under different network and POE layout scenarios, for **a)** ease of interaction and **b)** to determine if convergence criteria can be met. The scenarios for this exercise would be:

- Existing conditions: Compare current crossing times and volumes forecasted using TTDM/BorderWizard with observed values in the field. Use current POE configuration/operation as well as current regional transportation network layout.
    - For current year, forecast impact of implementing the transit "queue jumper" project at the Paso del Norte (PDN) POE.
    - For current year, forecast impact of implementing a new pedestrian and non-commercial vehicular crossing at the Sunland Park-Anapra proposed POE.

- **San Diego/CALTRANS**

- Use Border Wizard to compare existing traffic flow to how the modifications and dedicated lanes would alleviate congestion not only for participants but non-participants as well. Run different scenarios with existing infrastructure and then adding queuing lanes by 1 up to several additional lanes.

- **Northern Border**

- **Whatcom County MPO/Washington State DOT**

- Employ Border Wizard to conduct planning analyses to include:

- Estimation of delays and queues,
    - Testing of operational alternatives,
    - Estimation of system response to variable and often predictable changes in trip characteristics (mode, trip purpose, residence/nationally, commodity, empty truck, vehicle occupancy, etc.
    - Evaluation of benefits and costs associated with alternative system modifications.
    - Evaluation of benefits and costs associated with different trip-making behaviors (LTL moves, car-pooling, spikes in tourism/2010 Olympics trip characteristics).

- **Michigan DOT/SEMCOG**

- Use Border Wizard to test different input variables related to border crossing time. Traffic diversion to other crossings will also be examined if possible.

The following task description provides requirements associated with this grant.

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**Task 1 – Prepare and submit to FHWA a written summary of use of BW**

In order to allow FHWA administration to assess the usefulness of BW in transportation planning, grant recipients are required to provide a written case study of their BW project. Case studies should be provided to FHWA within 12 months of receiving funding. The following is general information and questions that should be addressed in the written case study.

- **Background** – this is a description of:
  - the problem that the local transportation and/or planning agencies were trying to solve
  - the project that was undertaken to examine the problem, identifying:
    - who sponsored the project
    - what other government agencies were involved
    - what resources each government agency contributed to the project (financial and other resources)
    - which contractors participated in the study
    - what roles the participating contractors played in the study
    - what the timeframe for the study was
- **Role of BW in the project** – this is a description of the specific purpose for which BW was used (or intended to be used) within the project
- **Use of BW** – this is a description of how BW was actually used on the project. It will discuss:
  - the sources of data used in modeling the border stations involved
  - the issues involved in collecting the data used in modeling the border stations involved
  - whether new border station layouts had to be created to model the border stations involved
  - whether any previously existing border station layouts had to be modified to model the border stations involved
  - who actually set up and executed simulations in BW, local agency personnel or contractor personnel
  - how much training was involved for the personnel who set up and executed simulations using BW
  - if someone other than Regal Decisions set up and executed the simulations, whether they consider BW easy to use and yielding of results that could easily be interpreted
  - what tools and reports were used to analyze the results of BW simulations
  - what calibration was done to the model
  - whether multiple simulations were run (and how many) to ensure that results given were reasonable and not dependent on a single set of parameters

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- what the parameters were for the different scenarios or experiments that were conducted with BW (i.e., what facilities were open, what time frames, etc.)
  - what was the cost associated with added model
- **Acceptance of BW Results** – this section will describe how well the results given by BW were accepted by the participants on the study (and their constituents, if BW results were presented to constituents). This will address such questions as the following:
  - Ease of Use
  - What were the qualitative benefits of using the model
  - How it enhanced existing modeling efforts
  - Were the results considered realistic?
  - Were the results considered useful?
  - How did the agencies use the results (and which results did they use) to provide feedback to their constituents?
  - Agency conclusion on application of BW
  - Would the sponsoring activity consider expending additional resources to integrate/interface BW with their existing planning tools
  - Recommendations on how BW can be improved to better address transportation issues at the border
- **Interface of BW to local transportation model(s)(if applicable)** – this section will describe what local models were integrated with BW and how well the interface worked. It will describe models used both as sources of data to BW and as recipients of BW data. If there is an attempt to interface a local model with BW, this is a critical aspect of the Case Study from the FHWA's point of view and this section will contain critical information of potential great use to other state and local transportation planning agencies.
- **Lessons Learned** – this section will discuss the major lessons learned about the use of BW for transportation planning and analysis on the specific project.